PATENT SPECIFICATION

1,004,252

1,004,25

Inventor: PAUL HENRY BUNTEN.

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Index at Acceptance:—F4 S (21C, 23A).

Int. Cl.:—F 25 h.

COMPLETE SPECIFICATION

DRAWINGS ATTACHED

Skirting Colvector With Connector Units

ERRATA

SPECIFICATION NO. 1,004,252

AMENDMENT NO. 1

Page 1, Heading Title *for* "Colvector" *read* "Convector"

Page 2, line 104 *for* "convector" *read* "connector"

HE PATENT OFFICE,
28th March, 1966

D 69415/3

assembled relation.

It is the principal object of the present invention to provide skirting convectors which can be quickly and easily installed, and which when in place will present an attractive appearance.

It is a further object of the present invention to provide skirting convectors which are simple in construction but in which sagging of the front panels is avoided, and in which the components are quickly and securely fastened and held together in assembled relation.

According to the invention there is provided a skirting convector having a vertically disposed back panel with a horizontally extending top section, spaced brackets supported by said back panel, a horizontally disposed heat transfer unit supported by said brackets, a front panel supported by said brackets and having a vertical front portion, a unitary connector unit for connecting said back and front panels comprising a top portion extending across said top section of said back panel and a front portion integral therewith, and ex-

[Price [redacted]

view of the side margin of one of the connecting units with the holding tongues in their initial positions and prior to installation.

Referring to the drawings, an elongated back panel 10 is provided of suitable unit lengths and has a vertical wall 11, an integral top wall 12 extending forwardly therefrom with a returned or hooked upper edge 13, and an integral inclined bottom wall 14 with an integral forwardly extending flange 15.

The back panels 10, of suitable length are secured to the vertical walls 16 of the room by suitable fasteners 17, such as screws, nails or the like.

Mounting brackets 18 are provided insertable in the back panels 10 at spaced locations. The mounting brackets 18 have rear wall sections 19 adapted to be disposed along the vertical wall 11, integral upper inclined sections 20 with forwardly extending integral upper locking pins 21, and integral forwardly extending lower legs 22 adapted to lie along the bottom wall 14 with their lower margins 23 engaged on the

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DRAWINGS ATTACHED

Skirting Colvector With Connector Units

WE, REPCO PRODUCTS CORPORATION, a corporation organised and existing under the laws of the State of Pennsylvania, of 7420 State Road, Philadelphia, Pennsylvania, United States of America, do hereby declare this invention for which we pray that a patent may be granted to us, and the method by which it is to be performed, to be particularly described in and by the following statement:—

This invention relates to skirting convectors.

Skirting convectors have gone into extensive use, but the structures now available involve difficulties in installation because of the necessity for using bolts, nuts, screws and the like for retaining the convectors in assembled relation.

It is the principal object of the present invention to provide skirting convectors which can be quickly and easily installed, and which when in place will present an attractive appearance.

It is a further object of the present invention to provide skirting convectors which are simple in construction but in which sagging of the front panels is avoided, and in which the components are quickly and securely fastened and held together in assembled relation.

According to the invention there is provided a skirting convector having a vertically disposed back panel with a horizontally extending top section, spaced brackets supported by said back panel, a horizontally disposed heat transfer unit supported by said brackets, a front panel supported by said brackets and having a vertical front portion, a unitary connector unit for connecting said back and front panels comprising a top portion extending across said top section of said back panel and a front portion integral therewith, and extending over said front portion of the front panel, said connector unit having at least one side marginal edge with bendable holding tongues in engagement with the back panel and the front panel.

The invention will now be described by way of example with reference to the accompanying drawings, in which:—

Figure 1 is a perspective view showing various aspects of a skirting convector in accordance with the invention;

Figure 2 is a vertical sectional view taken approximately on the line 2-2 of Figure 1, showing the manner of securing the components of the convector in position; and

Figure 3 is a fragmentary perspective view of the side margin of one of the connecting units with the holding tongues in their initial positions and prior to installation.

Referring to the drawings, an elongated back panel 10 is provided of suitable unit lengths and has a vertical wall 11, an integral top wall 12 extending forwardly therefrom with a returned or hooked upper edge 13, and an integral inclined bottom wall 14 with an integral forwardly extending flange 15.

The back panels 10, of suitable length are secured to the vertical walls 16 of the room by suitable fasteners 17, such as screws, nails or the like.

Mounting brackets 18 are provided insertable in the back panels 10 at spaced locations. The mounting brackets 18 have rear wall sections 19 adapted to be disposed along the vertical wall 11, integral upper inclined sections 20 with forwardly extending integral upper locking pins 21, and integral forwardly extending lower legs 22 adapted to lie along the bottom wall 14 with their lower margins 23 engaged on the

[Price [redacted]

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flange 15. This construction provided for insertion and resilient holding of the brackets 18 in place.

The mounting brackets 18 have extending forwardly from one side margin of the rear wall sections 19, an upper supporting arm 25 with a forward inclined edge 26 and curved top edge portion 27 and an intermediate slot 29 with a front supporting edge 30, a bottom margin 31 and a rear supporting edge tongue 32.

The slot 29 with its edge 30, bottom margin 31 and tongue 32 serves for the reception of an elongated divider strip 33.

The mounting brackets 18 also each have a lower supporting arm 35 which supports an integral horizontal platform portion 36 at the forward edge of which an upright flange 37 is provided. The flange 37 has a horizontal bracket piece 38 extending therefrom from which a downwardly extending holding tongue 39 extends.

The heat transfer units 40 can be of any desired type but preferably include a central heating fluid conducting pipe 41 with a plurality of closely spaced vertical sheet metal fins 42 mounted thereon. The fins 42 are shown as rectangular in shape, and at the locations at which the brackets 18 have their platform portions 36 directly therebelow, preferably have U-shaped metallic envelopes 43 to reduce noise attendant upon expansion and contraction with temperature changes.

Elongated front panels 45 are provided with lower vertical wall sections 46 having lower arcuate flanges 47 for engagement with the holding tongues 39.

The front panels 45 have upper inclined wall sections 48 for engagement with the edge 26, and an upper arcuate flange 49 which hooks over the curved top edge portion 27.

In accordance with the present invention, finishing connector fitting units are provided which can include end closure fittings 50, intermediate connector fittings 51, inside corner fittings 52 and outside corner fittings 53.

The finishing connector unit fittings 50, 51, 52 and 53, are preferably each made of a single piece of sheet metal suitably cut and shaped and have common characteristics including a horizontal top wall section 55, a rear vertical flange 56, an upper inclined front wall 57, a lower vertical front wall 58, and a lower marginal edge 59, and except for the end closure fitting 50 have two outer side marginal edges 60. The fitting 50 has only one edge 60 with a transverse end wall 61.

Each of the marginal edges 60, at the portion thereof extending along the inclined wall 57 has a T-shaped slot 62 (see Figure 3) cut therein which provides two holding tongues 63 and 64 initially extending towards each other.

The lower marginal edge 59, at each side marginal edge 60, initially has a holding tongue 65 extending vertically downwardly.

The back panels 10, mounting brackets 18, divider strips 33, front panels 45 and connector units 50, 51, 52 and 53, can advantageously be made of sheet aluminium.

In the installation of the skirting convector the back panels 10 are installed first, and are secured to the room walls 16 by the fasteners 17. The mounting brackets 18 are then snapped in place with their rims 21 first engaged in the hooked edges 13, and their lower margins 23 swung into engagement with the junction of the flanges 15 and bottom walls 14.

The heat transfer units 40 are then put in place with their envelopes 43 above the platform portions 36, and connected to adjacent heat transfer units 40.

The front panels 45 are then mounted in position by being hung first over the top edges 27 and then snapped over the holding tongues 39.

The divider strips 33 are then inserted in the slots 29 where they rest on the bottom margins 31 and engage with the edges 30 and tongues 32.

The connector fitting units are then applied as required for the particular installation with their rear flanges 56 forced downwardly behind the vertical walls 11. This may result in a slight forward deformation of the upper part of the wall 11 at these locations.

The horizontal top wall of the convector is in covering or overlapping relation to contiguous end portions of the top walls 12 of the back panels 10, the inclined front walls 57 are in overlapping relation to the contiguous end portions of the wall sections 48, and the lower vertical front walls 58 are in overlapping relation to the ends of the lower wall sections 46 of the front panels 45.

The tongues 63 are bent rearwardly in gripping engagement with the hooked edges 13, the tongues 64 are bent rearwardly and downwardly over the flanges 49 in gripping engagement therewith, and the tongues 65 are bent rearwardly and upwardly over the lower flanges 47 in gripping engagement therewith. The bending of the tongues 63, 64 and 65, is a simple operation, can be performed very rapidly and avoids the necessity for nuts, bolts, or screws which are difficult to secure at these locations.

The fittings 50, 51, 52 and/or 53 are held firmly in place and sagging of other parts, including the front panels 45 is avoided.

The fittings 50, 51, 52 and 53, the front panels 45, and the back panels 10 are tied

together and cannot become accidentally dislodged after assembly.

WHAT WE CLAIM IS :—

1. A skirting convector having a vertically disposed back panel with a horizontally extending top section, spaced brackets supported by said back panel, a horizontally disposed heat transfer unit supported by said brackets, a front panel supporttd by said brackets and having a vertical front portion, a unitary connector unit for connecting said back and front panels comprising a top portion extending across said top section of said back panel and a front portion integral therewith, and extending over said front portion of the front panel, said connector unit having at least one side marginal edge with bendable holding tongues in engagement with the back panel and the front panel.

2. A skirting convector as claimed in Claim 1, in which said connector unit has a rear flange in engagement with said back panel and one of said holding tongues in engagement with the forward edge of the top section of said back panel.

3. A skirting convector as claimed in Claim 1, in which said connector unit has one of said holding tongues in engagement with said back panel and a plurality of said holding tongues in engagement with said front panel.

4. A skirting convector as claimed in Claim 3, in which said connector unit has a rear flange in engagement with said back panel and a bendable holding tongue in engagement with the forward edge of the top section of said back panel.

5. A skirting convector as claimed in Claim 1, in which said connector unit has a rear flange in engagement with said back wall panel, one of said bendable holding tongues being in engagement with the forward edge of said back panel, an upper bendable holding tongue in engagement with an upper portion of said front panel, and a lower bendable holding tongue in engagement with a lower portion of said front panel.

6. A skirting convector having vertically disposed back panels with horizontally extending top portions aligned with each other, spaced brackets supported by said back panels, horizontally extending heat transfer units supported by said brackets, front panels supported by said brackets with aligned vertical front walls, a unitary connector unit comprising a top portion in overlapping relation to said top portions of the back panels, said connector unit having a front portion integral with said top portion in overlapping relation to said vertical front walls, and said connector unit having side marginal edges each with bendable holding tongues in engagement with a back panel and a front panel.

7. A skirting convector as claimed in Claim 6, in which said connector unit is a corner unit.

8. A skirting convector as claimed in Claim 6, in which said connector unit has a rear flange in engagement with contiguous back wall panels, said connector unit having a bendable holding tongue in engagement with the forward edge of said back panel, and said connector unit having upper bendable holding tongues in engagement with upper portions of contiguous front panels and lower bendable holding tongues in engagement with lower portions of said front panels.

9. A skirting convector substantially as described and as shown in the accompanying drawings.

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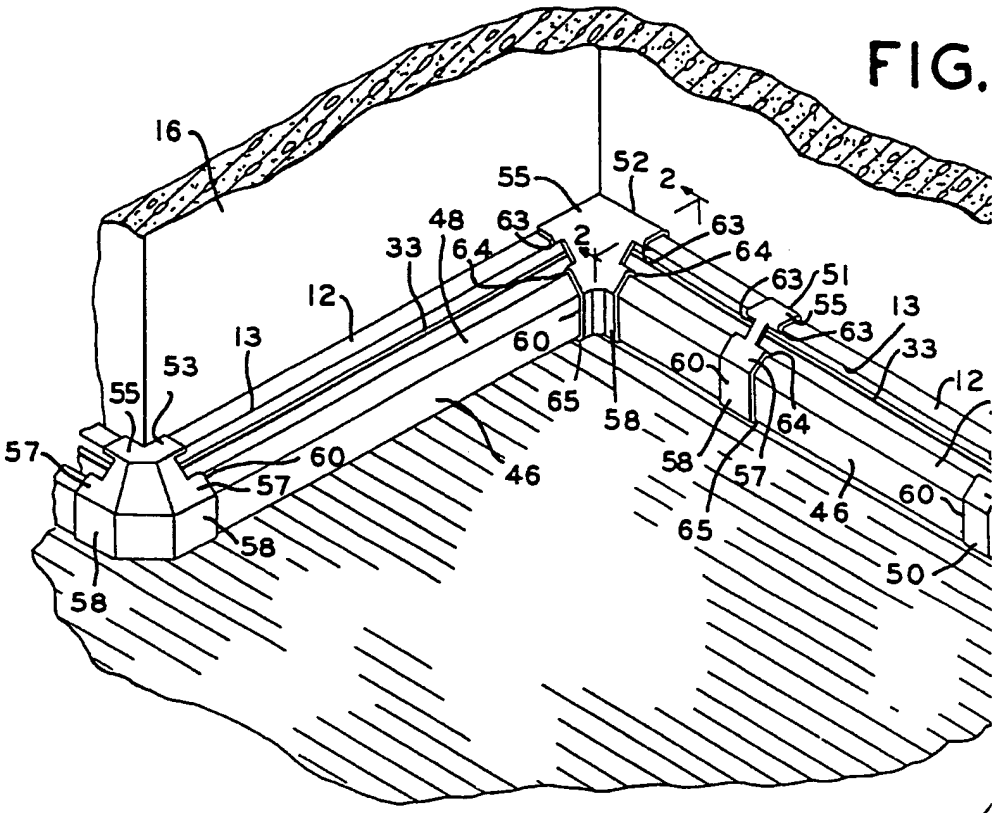
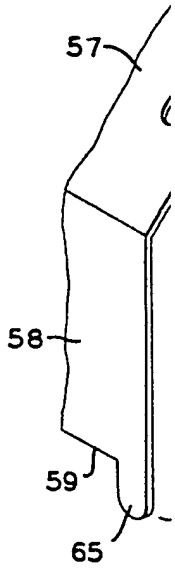
Published at The Patent Office, 25 Southampton Buildings, London, W.C.2 from which copies may be obtained.

FIG.





1,004,252 COMPLETE SPECIFICATION
1 SHEET

This drawing is a reproduction of the Original on a reduced scale.

FIG.1

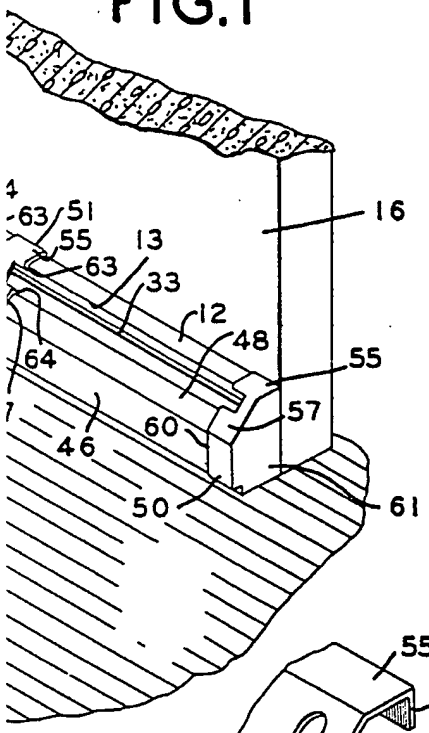
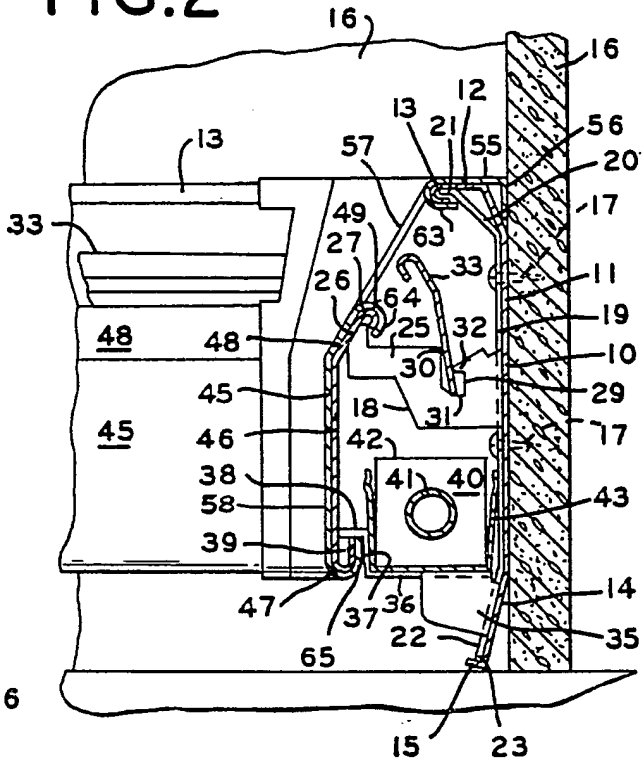


FIG.2



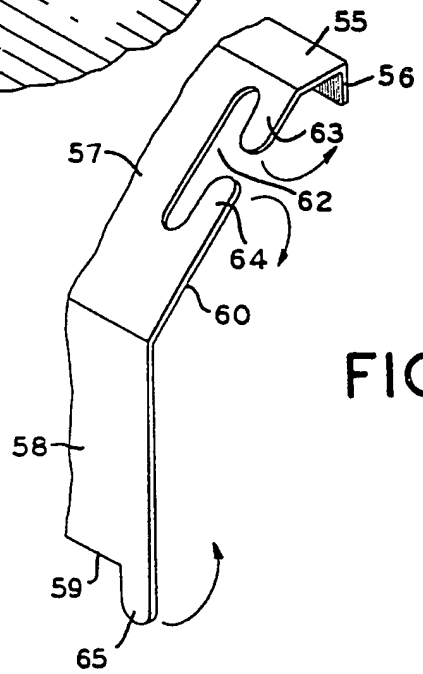


FIG.3

1,004,252 COMPLETE SPECIFICATION
1 SHEET

This drawing is a reproduction of the Original on a reduced scale.

FIG.1

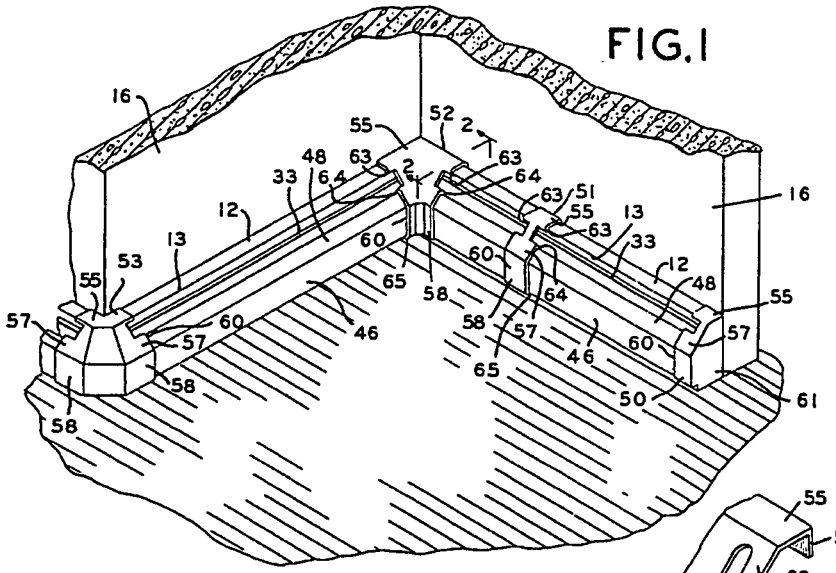
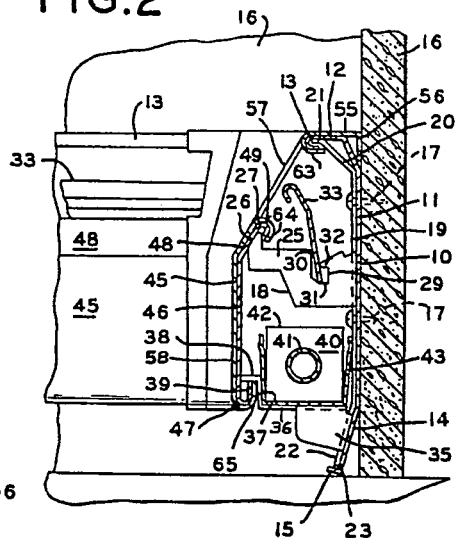


FIG.2



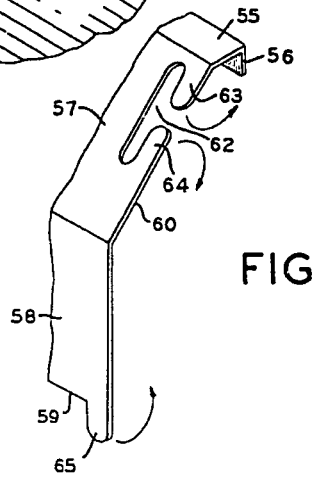


FIG.3